## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. **(Previously Presented)** An isolated cadherin-like asymmetry protein 2 (CLASP-2) polynucleotide, wherein said polynucleotide comprises a nucleic acid encoding SEQ ID NO:2.
- 2. **(Previously Presented)** The polynucleotide of claim 1, wherein said polypeptide specifically binds to a PSD-95, Dlg, and Zo-1 domain (PDZ domain) of postsynaptic density protein of 95 kDa (PSD95), discs large 1 protein (DLG1) or neuroendocrine DLG (neDLG).
- 3. (**Original**) The polynucleotide of claim 2, wherein said polypeptide has a binding affinity of at least 10<sup>4</sup> M<sup>-1</sup> for binding PSD95, DLG1 or neDLG.
  - 4. (Cancelled)
- 5. **(Original)** The isolated polynucleotide of claim 1, comprising the cDNA coding sequence of ATCC Deposit Nos. PTA-1562 and PTA-1563 and PTA-1573.
- 6. (Currently Amended) An isolated <u>cadherin-like asymmetry protein 2 (CLASP-2)</u> polynucleotide comprising SEQ ID NO: 1.
- 7. **(Withdrawn)** An isolated polypeptide comprising a nucleotide sequence that has at least 90% sequence identity to SEQ ID NO: 2, 4, 6 or 10 and is immunologically crossreactive with SEQ ID NO: 2, 4, 6 or 10 or shares a biological function with native CLASP-2.
  - 8. (Original) A vector comprising the polynucleotide of claim 1.

Appl. No. 10/663,538 Amdt. dated April 17, 2008 Examining Group 1647

- 9. **(Original)** An expression vector comprising the polynucleotide of claim 1 in which the nucleotide sequence of the polynucleotide is operatively linked with a regulatory sequence that controls expression of the polynucleotide in a host cell.
- 10. (Currently Amended) A host cell comprising the polynucleotide of claim 1, or progeny of the host cell, wherein the host cell is an isolated cell or a prokaryotic cell or a yeast cell.
- 11. (Currently Amended) A host cell comprising the polynucleotide of claim 1, or progeny of the host cell, wherein the host cell is an isolated cell or a prokaryotic cell or a yeast cell, and wherein the nucleotide sequence of the polynucleotide is operatively linked with a regulatory sequence that controls expression of the polynucleotide in a host cell, or progeny of the cell.
  - 12. **(Original)** The host cell of claim 10 which is a eukaryote.
- 13. **(Withdrawn)** The polynucleotide of claim 1 that is an antisense polynucleotide less than about 200 bases in length.
- 14. **(Withdrawn)** An antisense oligonucleotide complementary to a messenger RNA comprising SEQ ID NO: 1, 3, 5 or 9 and encoding CLASP-2, wherein the oligonucleotide inhibits the expression of CLASP-2.
- 15. (Currently Amended) An isolated DNA that encodes <u>a cadherin-like asymmetry</u> protein 2 (CLASP-2) protein of-SEQ ID NO: 2.
  - 16. **(Original)** The polynucleotide of claim 1 that is RNA.
  - 17. **(Original)** A method for producing a polypeptide comprising:
- (a) culturing the host cell of claim 10 under conditions such that the polypeptide is expressed; and
  - (b) recovering the polypeptide from the cultured host cell or its cultured medium.

Appl. No. 10/663,538 Amdt. dated April 17, 2008 Examining Group 1647

- 18. **(Withdrawn)** An isolated polypeptide encoded by a polynucleotide of claim 1 (a) or (b).
- 19. **(Withdrawn)** The polypeptide of claim 18 that has the amino acid sequence of SEQ ID NO: 2, 4, 6 or 10, or a fragment thereof.
- 20. **(Withdrawn)** The isolated polypeptide of claim 18, wherein the polypeptide is cell-membrane associated.